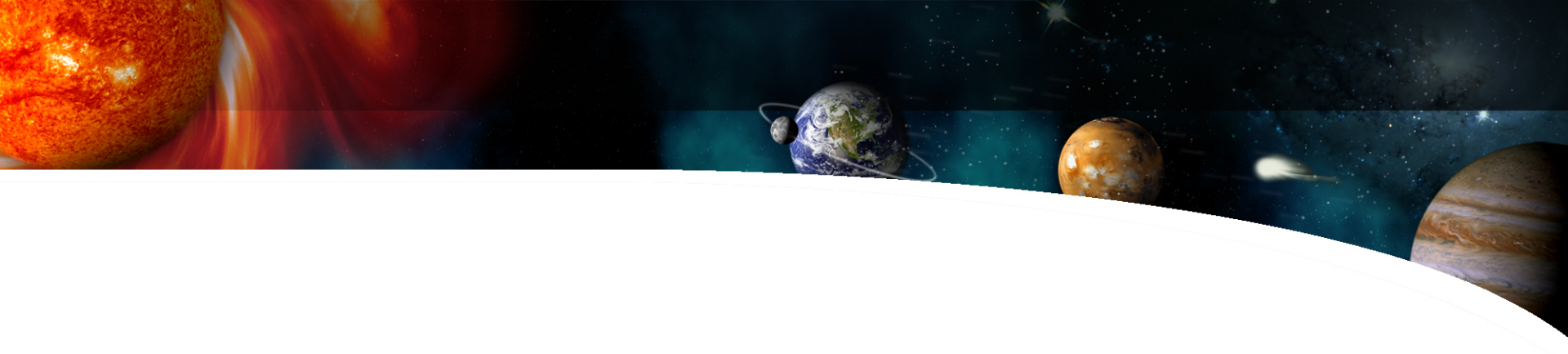
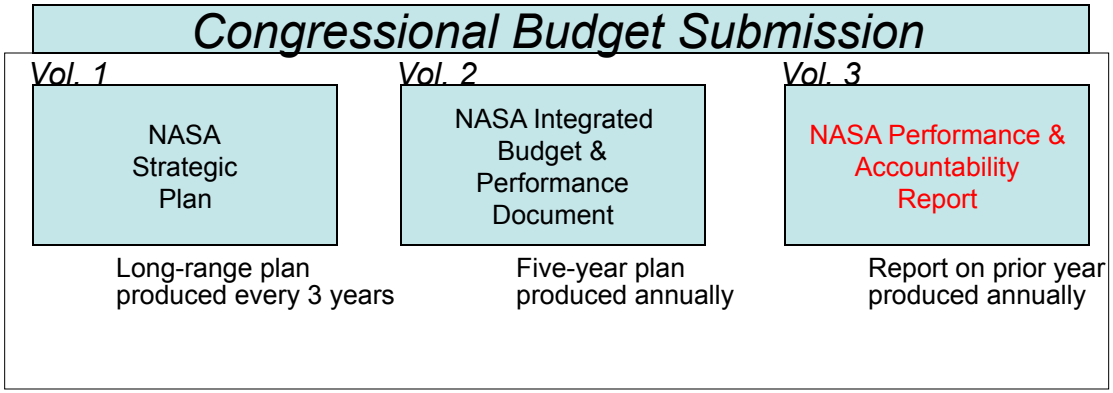


FY12 Heliophysics Science Performance Assessment (aka GPRA)

J. Newmark
NASA HQ

Government Performance and Results Act (GPRA)

The Government Performance and Results Act (GPRA) of 1993 provided a tool to improve the efficiency of all Federal agencies. The act directs all Executive Branch agencies to maintain customer-focused strategic plans with long-term goals, develop annual indicators to determine whether goals were being reached, and provide annual performance reports on the results achieved.



However, changes for the future are being mandated by OMB. Stay tuned.

Access to all NASA GPRA Materials:
http://www.nasa.gov/news/budget
http://www.nasa.gov/offices/ocfo/budget/Par_detail.html

Heliophysics FY12 Outcome and Objectives

Outcome 2.2	Understand the Sun and its interactions with Earth and the solar system.
Objective 2.2.1	***Improve understanding the fundamental physical processes of the space environment from the Sun to Earth, to other planets, and beyond to the interstellar medium.***
Objective 2.2.2	***Improve understanding how human society, technological systems, and the habitability of planets are affected by solar variability interacting with planetary magnetic fields and atmospheres.***
Objective 2.2.3	***Maximize the safety and productivity of human and robotic explorers by developing the capability to predict extreme and dynamic conditions in space.***

Heliophysics FY12 Annual Performance Goals

Outcome 2.2	Understand the Sun and its interactions with Earth and the solar system.	
Objective 2.2.1	***Improve understanding the fundamental physical processes of the space environment from the Sun to Earth, to other planets, and beyond to the interstellar medium.***	**TBD**
APG HE-12-1	Demonstrate planned progress in understanding the fundamental physical processes of the space environment from the Sun to Earth, to other planets, and beyond to the interstellar medium. Progress relative to the objectives in NASA's 2010 Science Plan will be evaluated by external expert review.	**TBD**
APG HE-12-2	*By 2015, launch two missions in support of this outcome.* Complete the Magnetospheric MultiScale (MMS) Systems Integration Review.	G
APG HE-12-3	*By 2015, launch two missions in support of this outcome.* Complete the Geospace Radiation Belt Storm Probes Launch Readiness Review.	G

Heliophysics FY12 Annual Performance Goals

Outcome 2.2	Understand the Sun and its interactions with Earth and the solar system.	
Objective 2.2.2	***Improve understanding how human society, technological systems, and the habitability of planets are affected by solar variability interacting with planetary magnetic fields and atmospheres.***	**TBD**
APG HE-12-4	Demonstrate planned progress in understanding how human society, technological systems, and the habitability of planets are affected by solar variability interacting with planetary magnetic fields and atmospheres. Progress relative to the objectives in NASA's 2010 Science Plan will be evaluated by external expert review.	**TBD**
APG HE-12-2	*By 2015, launch two missions in support of this outcome.* Complete the Magnetospheric MultiScale (MMS) Systems Integration Review.	G
APG HE-12-3	*By 2015, launch two missions in support of this outcome.* Complete the Geospace Radiation Belt Storm Probes Launch Readiness Review.	G

Heliophysics FY12 Annual Performance Goals

Outcome 2.2	Understand the Sun and its interactions with Earth and the solar system.	
Objective 2.2.3	***Maximize the safety and productivity of human and robotic explorers by developing the capability to predict extreme and dynamic conditions in space.***	**TBD**
APG HE-12-5	Demonstrate planned progress in maximizing the safety and productivity of human and robotic explorers by developing the capability to predict the extreme and dynamic conditions in space. Progress relative to the objectives in NASA's 2010 Science Plan will be evaluated by external expert review.	**TBD**
APG HE-12-3	*By 2015, launch two missions in support of this outcome.* Complete the Geospace Radiation Belt Storm Probes Launch Readiness Review.	G

Performance and Accountability Report Process

- There are three Annual Performance Goals in the NASA budget against which the subcommittee is asked to assess progress:
  - APG HE-12-1 Demonstrate planned progress in understanding the **fundamental physical processes of the space environment from the Sun to Earth, to other planets, and beyond to the interstellar medium**. Progress relative to the objectives in NASA's 2010 Science Plan will be evaluated by external expert review,
  - APG HE-12-4 Demonstrate planned progress in **understanding how human society, technological systems, and the habitability of planets are affected by solar variability interacting with planetary magnetic fields and atmospheres**. Progress relative to the objectives in NASA's 2010 Science Plan will be evaluated by external expert review,
  - APG HE-12-5 Demonstrate planned progress in **maximizing the safety and productivity of human and robotic explorers by developing the capability to predict the extreme and dynamic conditions in space**. Progress relative to the objectives in NASA's 2010 Science Plan will be evaluated by external expert review.

Know your jargon lesson: HPS assesses progress on three APGs cited within the NASA budget.

Performance and Accountability Report Process

- The subcommittee is tasked with making a high-level, subjective assessment of science performance and should base their evaluations on their general sense of progress as evidenced by key accomplishments or disappointments for each of the three objectives.
- The subcommittee is asked to document their high-level assessment by assigning a color-code “grade” for each objective and providing short explanatory text that includes an overview and example achievements (shortfalls) upon which they based their assessment.
- SMD starts this process by providing draft science accomplishments for each science objective. The Subcommittee then reviews these inputs and edits, adds, and/or delete items to form their report.

Know your jargon: The PAR is submitted in partial fulfillment of our annual GPRA requirements.

GPRA Rating Definitions

Code	SMD Guidelines for PAR Science Ratings	NASA PAR Ratings
GREEN	Expectations for the research program fully met in context of resources invested.	Achieved annual performance goal.
YELLOW	Some notable or significant shortfalls, but some worthy scientific advancements achieved.	Failed to achieve annual performance goal, progress was significant, and achievement is anticipated within the next fiscal year.
RED	Major disappointments or shortfalls in scientific outcomes, uncompensated by other unusually positive results.	Failed to achieve annual performance goal, completion within the next fiscal year is not anticipated, and target may be infeasible or unachievable.